

WHAT IS CLAIMED IS:

1. An apparatus comprising:

(A) a photo-receiving device that receives light from an object and converts the light into an image

5 signal; and

(B) a focus adjusting device that forms a first focus adjusting signal by performing a predetermined integration operation on a predetermined frequency component of the image signal obtained by said photo-receiving device and forms a second focus adjusting signal, different from said first focus adjusting signal, from a peak value of a predetermined frequency component of the image signal obtained by said photo-receiving device, said focus adjusting device applying
10 at least one of said first and second focus adjusting signals to focus adjustment on the basis of a luminous state of the object.

2. The apparatus according to claim 1, wherein said predetermined frequency component is a frequency
20 component on a predetermined high frequency side.

3. The apparatus according to claim 1, wherein said focus adjusting device judges the state of the luminous state of the object on the basis of the image signal obtained by said photo-receiving device.

25 4. The apparatus according to claim 1, wherein said focus adjusting device applies at least one of said

first and second focus adjusting signals to the focus adjustment on the basis of a luminous distribution state of the object.

5. The apparatus according to claim 1, wherein said
5 focus adjusting device applies said second focus adjusting signal to the focus adjustment in a case where an object image is judged as a peak image on the basis of the luminous state of the object.

6. The apparatus according to claim 5, wherein said
10 focus adjusting device applies said first focus adjusting signal to the focus adjustment in a case where an object image is not judged as a peak image on the basis of the luminous state of the object.

7. The apparatus according to claim 1, wherein said
15 focus adjusting device applies said first focus adjusting signal to the focus adjustment in a case where an object image is not judged as a peak image on the basis of the luminous state of the object.

8. The apparatus according to claim 1, wherein said
20 focus adjusting device forms said first focus adjusting signal by integrating a predetermined peak value of said predetermined frequency component of the image signal obtained by said photo-receiving device.

9. The apparatus according to claim 8, wherein said
25 focus adjusting device forms said second focus adjusting signal by obtaining said peak value without

performing said predetermined integration operation on said predetermined frequency component of the image signal obtained by said photo-receiving device.

10. The apparatus according to claim 8, wherein said
5 focus adjusting device forms said second focus adjusting signal from a peak value of the predetermined frequency component of the image signal obtained by said photo-receiving device.

11. The apparatus according to claim 1, wherein said
10 focus adjusting device forms said second focus adjusting signal by obtaining said peak value without performing said predetermined integration operation on the predetermined frequency component of the image signal obtained by said photo-receiving device.

12. The apparatus according to claim 1, wherein said
15 focus adjusting device forms said second focus adjusting signal from a single peak value of a predetermined frequency component of the image signal obtained by said photo-receiving device.

13. The apparatus according to claim 1, wherein said
20 focus adjusting device judges the luminous state of the object on the basis of a peak value of luminance of the object and an average value of the luminance of the object.

14. The apparatus according to claim 1, wherein said
25 focus adjusting device applies at least one of said

first and second focus adjusting signals to the focus adjustment in consideration of a state of a focal length.

15. The apparatus according to claim 14, wherein said
5 focus adjusting device applies at least one of said first and second focus adjusting signals to the focus adjustment in consideration of a state of an iris.

16. The apparatus according to claim 1, wherein said
10 focus adjusting device applies at least one of said first and second focus adjusting signals to the focus adjustment in consideration of a state of an iris.

17. The apparatus according to claim 1, wherein said focus adjusting device changes a focus adjusting signal to be applied to the focus adjustment from said second
15 focus adjusting signal to said first focus adjusting signal as depth of field is deepened by at least one of a focal length and an iris.

18. The apparatus according to claim 1, wherein said apparatus comprises an image sensing apparatus.

20 19. The apparatus according to claim 1, wherein said apparatus comprises a camera.

20. The apparatus according to claim 1, wherein said apparatus comprises an optical device.

21. An apparatus comprising:
25 (A) a photo-receiving device for receiving light from an object; and

(B) a focus adjusting device performing an operation for focus adjustment, said focus adjusting device performing the operation depending upon determination whether or not an object image has a

5 luminous state judged as a peak image on the basis of a photo-received signal from said photo-receiving device.

22. The apparatus according to claim 21, wherein said focus adjusting device forms a signal for the focus adjustment on the basis of the photo-received signal
10 from said photo-receiving device.

23. The apparatus according to claim 22, wherein said focus adjusting device forms a signal for the focus adjustment by detecting sharpness of an object image.

24. The apparatus according to claim 21, wherein said
15 focus adjusting device forms a signal for the focus adjustment by detecting sharpness of an object image.

25. The apparatus according to claim 21, wherein said apparatus comprises an image sensing apparatus.

26. The apparatus according to claim 21, wherein said
20 apparatus comprises a camera.

27. The apparatus according to claim 21, wherein said apparatus comprises an optical device.

28. A focus adjusting method comprising:

converting light from an object into an image
25 signal, forming a first focus adjusting signal by performing a predetermined integration operation on a

predetermined frequency component of the image signal,
forming a second focus adjusting signal, different from
said first focus adjusting signal, from a peak value of
a predetermined frequency component of the image signal,
5 applying at least one of said first and second focus
adjusting signal to focus adjustment on the basis of a
luminous state of the object.

29. A focus adjusting method comprising:

performing an operation for focus adjustment
10 depending upon determination whether or not an object
image has a luminous state judged as a peak image on
the basis of a photo-received signal of light of the
object.

30. A computer program product comprising:

15 converting light from an object into an image
signal, forming a first focus adjusting signal by
performing a predetermined integration operation on a
predetermined frequency component of the image signal,
forming a second focus adjusting signal, different from
20 said first focus adjusting signal, from a peak value of
a predetermined frequency component of the image signal,
applying at least one of said first and second focus
adjusting signal to focus adjustment on the basis of a
luminous state of the object.

31. The computer program product according to claim 30, wherein said computer program product comprises a storage medium.

32. A computer program product comprising:

5 performing an operation for focus adjustment depending upon determination whether or not an object image has a luminous state judged as a peak image on the basis of a photo-received signal of light of the object.

10 33. The computer program product according to claim 32, wherein said computer program product comprises a storage medium.